

10/Response
P. Wallis
9-24-03

67,023-008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: McDonald

Serial No.: 10/085,421

Filed: 2/28/02

Group Art Unit: 2856

Examiner: M. Cygan

Title: HEATED STAINLESS STEEL EMISSIONS CANISTER

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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RESPONSE

Dear Sir:

This is in response to the Office Action mailed June 9, 2003 (paper no. 8).

Claims 1-22 are presently pending in the application. Claims 1 and 12 are in independent form. Claims 5-7 and 19-22 were objected to but indicated as allowable if amended to include the limitations of the base claim and any intervening claims.

The examiner has essentially maintained the rejections of the prior office action but added the Delajoud reference to provide a pressure mass flow controller instead of the thermal mass flow controller taught by Akiyama. In rejecting the pending claims, the examiner argues that it would have been obvious to use the pressure mass flow controller taught by Delajoud instead of the

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thermal mass flow controller of Akiyama "since Delajoud teaches that the pressure mass flow controller is accurate, low cost, easily cleaned, has an easily altered gas flow range, and is highly stable over time." The Examiner's motivation is flawed, and one of ordinary skill in the art would not modify Akiyama with the pressure mass flow controller of Delajoud.

The Examiner cannot establish motivation by merely demonstrating that the pressure mass flow controller has desirable features. Rather, the Examiner must show that there is some benefit to replacing the thermal mass flow controller with a pressure flow controller.

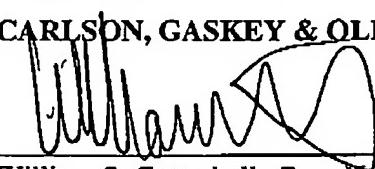
Delajoud teaches a pressure mass flow controller for use in the semi-conductor industry. In that particular industry, there is no convenient, accurate way of *in situ* calibrating mass flow controllers for thermal mass flow controller applications. This is not the case in the exhaust gas sampling industry. A thermal mass flow controller in the exhaust gas sampling industry is calibrated *in situ* by flowing a calibration gas of having known thermal properties, such as nitrogen, through the thermal mass flow controller. Other calibration gases may also be used. Since the composition of the nitrogen gas is known, the thermal mass flow controller can be accurately calibrated. This is a common practice in the exhaust gas sampling industry for many applications. For this reason alone, there is absolutely no motivation to modify Akiyama with the teachings of Delajoud. Akiyama discloses a system that is capable of convenient *in situ* calibration. Said another way, given the teaching of Akiyama and Delajoud one of ordinary skill in the art would not conclude that a pressure mass flow controller would perform any better in the Akiyama system.

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With regard to the teachings of Delajoud that the mass flow controller is accurate, low cost, and easily cleaned, this teaching does not motivate one to use a pressure mass flow controller over a thermal mass flow controller. That is, the teaching that the pressure mass flow controller is accurate and low cost, is not relative to that of a thermal mass flow controller. The examiner's comments regarding the teachings of Delajoud that the pressure mass flow controller has an easily altered gas flow range, and is highly stable over time, has no apparent benefit in Akiyama. A thermal mass flow controller is accurate over a wide gas flow range also and is also highly stable over time. Furthermore, in the exhaust sampling industry, a thermal mass flow controller is frequently calibrated to confirm and maintain its accuracy using a calibration gas, as discussed above. In summary, the teachings of Delajoud do not have any benefit in the Akiyama exhaust gas sampling system.

For the reasons set forth above, Applicant submits that the pending claims in the application are allowable. Applicant respectfully solicits allowance of these claims. If any fees or extensions of time are required, please charge to Deposit Account No. 50-1482.

Respectfully submitted,
CARLSON, GASKEY & OLDS



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Dated: September 9, 2003

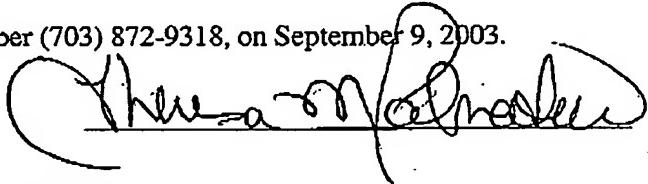
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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, fax number (703) 872-9318, on September 9, 2003.



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